submit the order via facsimile. However, TCG can never be certain that the correct person received the order, that the transmission went through clearly or even that fax was ever delivered. Even if the order is correctly delivered, the ILEC recipient must re-key in the order information. Such a manual process, with multiple failure points, cannot be relied upon.

The current provisioning processes are also ineffective at delivering equal quality service from the ILECs. Instead of being able to check electronically on the status of installation and testing dates, testing results, and capacity measurements, CLECs must telephone the ILEC and request the information verbally. Typically this could involve being put on hold and transferred several times until finally reaching someone who can answer the question. Again, manual processes are simply not up to the task.

If an ILEC could install our loops as quickly as it installs its own loops when we order via facsimile, so be it. If an ILEC could give us installation status or outage status information orally as quickly as it provides its own folks with the same information electronically, so be it. TCG believes, however, that as order volumes increase, the ILECs' performance will only worsen. TCG believes that ILECs will not be able to deliver "equal quality" without "electronic bonding" of the ILEC's OSS with the CLEC's OSS. And you can be certain that TCG will be diligent in making sure that ILECs meet their performance parity obligation.

In short, the "Performance Parity Principle" demands that, by whatever means, the ILEC must provide interconnection and unbundled elements in a manner that is at least equal in quality to that which the ILEC provides to itself. Parity must be provided for all stages of the interconnection and unbundled element delivery process --including ordering,

provisioning, maintenance and repair. It has been TCG's experience that the current processes do not provide such parity, and that equal and nondiscriminatory interconnection and unbundled element access is only likely to be achieved through electronic bonding between CLEC and ILEC OSS systems.

Finally, it is important – indeed essential – to recognize that the industry cannot simply say that the ILECS must just deliver OSS bonding and, once it is operational, then all is well and the job is done. Effective OSS processes are necessary for a variety of other essential network relationships to function effectively and fairly. Electronic bonding of OSS systems means simply that information can flow promptly and accurately between CLECs and ILECs. If ILECs are delayed or inept in installing, maintaining, or repairing unbundled elements, then the prospects for a robust and fair competitive market will be diminished.

STATEMENT OF

ELIZABETH A. HAM

EXECUTIVE DIRECTOR-INTERCONNECTION AND RESALE TECHNICAL IMPLEMENTATION

Southwestern Bell Telephone Company

for the

Federal Communications Commission
Common Carrier Bureau
Forum on Operations Support System

May 28 and 29, 1997

Washington, D.C.

STATEMENT OF

ELIZABETH A. HAM

EXECUTIVE DIRECTOR-INTERCONNECTION AND RESALE

TECHNICAL IMPLEMENTATION

SOUTHWESTERN BELL TELEPHONE COMPANY

As noted by the FCC in its Second Order on Reconsideration, successful ordering and provisioning requires access to the incumbent LECs' OSS that is equivalent to that which they provide to themselves, their affiliates or customers. In order to satisfy this requirement, Southwestern Bell and Pacific Bell currently provide multiple mechanical interface options to CLECs for OSS access, and continue to work on the development of additional or improved interfaces, including EDI. While complete flow-through and EDI are the end goals, even the FCC recognized in its Second Order on Reconsideration that full electronic access would not occur overnight. As we, the other RBOCs and the CLECs have discovered, the "devil is in the details." Successful implementation of access to OSS functions requires the full cooperation of all parties and the elimination of public posturing and gaming.

For preordering, ordering and provisioning, Southwestern Bell provides CLECs with a choice of three electronic interfaces, EASE, EDI and LEX, each of which meet the FCC's requirements for access to OSS functions that is equal to the access Southwestern Bell provides itself. EASE was developed and is used by Southwestern Bell's retail representatives and provides CLECs identical access to Southwestern Bell's "back office systems." Electronic Data Interchange (EDI) Gateway conforms with OBF/TCIF national standard guidelines. EDI allows CLECs to submit Local Service Requests (LSRs) to Southwestern Bell, receive acknowledgments, confirmations and completion status utilizing their own user interfaces. The LSR Exchange System (LEX) is a graphical user interface that is being developed based upon OBF/LSR standards. LEX will enable CLECs to electronically create and transmit LSRs to Southwestern Bell, to receive acknowledgments and notification of error details, and track firm order confirmation and

service order completion status of LSRs. LEX will be trialed by two CLECs next month. Southwestern Bell also provides CLECs with an electronic interface to check on the status of a pending order that has been entered and accepted for processing. Finally, Southwestern Bell provides a method to permit manual input of information for those CLECs that do not want to utilize an electronic interface.

Pacific Bell provides preordering functions to CLECs via the CLEO interface. CLEO permits CLECs to validate service address, check product and feature availability, reserve telephone numbers, check service and feature availability, and obtain due dates for non-dispatched orders utilizing the same "back office" systems Pacific uses for its retail business. Pacific provides resale orders and provisioning to CLECs via its Network Data Mover (NDM). Currently, all resale orders are entered manually by Pacific into SORD. To improve order intake, Pacific continues to augment its forces and enhance its systems. Pursuant to an agreement with the CLECs, Pacific will implement software changes to NDM in July to initiate flow-through of resale migration orders. CLECs submit orders to Pacific for unbundled network elements using the CESAR system. Pacific is also developing an EDI, which will conform to industry standards and Pacific's negotiated interconnection agreements. Finally, Pacific provides a method to permit manual input of information for those CLECs that do not want to utilize an electronic interface.

Once an order is accepted by Southwestern Bell or Pacific Bell, the order flows through the provisioning processes in precisely the same manner as a retail order. In fact, Southwestern Bell's and Pacific Bell's systems do not distinguish between retail and wholesale orders.

Some parties allege that Southwestern Bell's OSS interfaces are not operationally and commercially satisfactory because no large CLEC has submitted significant volumes to challenge the operation of these interfaces. Just because a CLEC has not submitted such volumes, or chooses not to do so, does not constitute the commercial insufficiency of a system. To the contrary, some systems have been serving Southwestern Bell's

2

"commercial" needs for several years. For example, EASE has been operational and commercially used by Southwestern Bell for years to satisfy its ordering/provisioning needs. EASE has been, and continues to be, subjected to daily "commercial stress tests" by Southwestern Bell service representatives as they perform their jobs. EASE affords CLECs the necessary functionality for ordering and provisioning activities, among others, on precisely the same bases as is available to Southwestern Bell's employees.

With regard to performance verification, Southwestern Bell already submits certain measurement reports to various State Commissions. Where applicable, these state requirements and others are included in negotiated interconnection agreements and are reported to the CLECs. Both Southwestern Bell and Pacific Bell have negotiated specific performance measurements with individual CLECs, which include liquidated damages penalties. Included in these reports are measurements related to intervals for installation, repair, ordering and provisioning. With these submissions, the Southwestern Bell and Pacific Bell have agreed to provide the meaningful performance measurement that the CLECs felt important enough to request, negotiate, and in many cases, arbitrate. No further reporting requirements for performance standards are necessary nor are required by the Act.

As you are aware, Pacific Bell and Nevada Bell recently became part of SBC Communications Inc. You may also be aware that some parties have complained about Pacific Bell's ability to process resale orders. I am not here today to address the past experience of Pacific. Pacific has responded to CLECs' complaints in the appropriate fora and will continue to improve its performance by adding additional service representatives, enhance the existing ordering system, and continue negotiations with CLECs to develop an EDI. Southwestern Bell and Pacific Bell will continue to work with the CLECs individually and the industry as a whole to develop and enhance the electronic interfaces.

# # #

EX PARTE OR LATE FILED

Common Carrier Bureau OSS Forum
Ordering/Provisioning
May 29, 1997

Summary of Remarks
John Lenahan
Assistant General Counsel, Ameritech

1. **Overview of necessary "functionality" for successful ordering and provisioning.**

    A) Ordering: the interface should be capable of processing a projected mix and quantity of order activity:

        Typical "850's"

        New Order
        - "Assume as is"
        - "Assume as specified"
        - New account

        Change Orders
        - Delete Account
        - Change (No premise visit)
        - Change (Premise visit required)

        Disconnect

    B) Provisioning: the interface should be capable of timely informing the CLEC of the status of its order:

        Typical "Status" Notifications

        - Order Acknowledgment - "997"
        - Firm Order Confirmation - "855"
        - Order Completion - "865"
        - Notice of loss - "836"

2. **Flowthrough required to provide nondiscriminatory access.**

A) Legal Standards

. The Commission has rightly focused on the actions a CLEC is required to take to place an order.

. If the ILEC can access its ordering functions electronically, then it can not limit CLEC access to those ordering functions by a method that requires human intervention by the CLEC, such as facsimile-based ordering. para. 523

. However, so long as the CLEC order is received electronically, the degree of manual intervention on the ILEC-side of the EDI interface is a business decision, based on a cost/benefit analysis.

B) There are two types of flowthrough: interface and legacy.

. The EDI interface is intended to pass data between carriers in agreed formats and to facilitate order entry into the ILEC's legacy system.

. Once a CLEC order has flowed into Ameritech's legacy system, it's flowthrough to the existing subsystems is treated the same as a retail order. As designed, and as maintained, Ameritech's legacy systems are "blind" to the underlying carrier.

C) Actual Ameritech "interface" flowthrough January 1997 - May 1, 1997:

Resale Orders Electronically Received	19,671
Electronically Rejected - 9%	1,792
Processed As Planned - 91%	17,879
Electronic Flowthrough	8,978
Manual Intervention	8,901

D) Manual Intervention on EDI Orders

1. Incorrect or Incomplete Order -- e.g., Phone Number on CSR doesn't match order, not all requested telephone number are on CSR.

2. Order Content or Complexity -- e.g., type of
   service (Centrex), facility assignment required or
   "remarks" field is completed

3. Involves a "scan" or "edit," widespread rekeying
   is not involved.

4. Trend: Current experience 31%, down from 80% in
   January

E) EDI Order Rejects

1. Input edit checks, e.g., EDI syntax violations

2. Front-end system checks, e.g., invalid USOC

3. Trend: Current experience 7.3% down from 35% in
   January, e.g., 4/29/97 3,830 orders electronically
   received, 56 rejected, or 1.4%.

3. **Performance Measurements and Reports to ensure parity
    for ordering and provisioning.**

    . Firm Order Confirmation
    . Installation Intervals
    . Due Dates not met
    . Order Completion Notification

Statement of Wayne Fonteix
AT&T Local Markets Director
Ordering and Provisioning Operations Support Systems
Before the FCC, May 29, 1997

Thank you for the opportunity to discuss with you the critical ordering and provisioning functions of incumbent LEC operations support systems (OSSs).

New entrants are completely dependent on ILEC ordering and provisioning systems in order to be in business. If those incumbent systems don't allow new entrants to efficiently order and provide resale services or unbundled elements, there is no prospect that competition will take root in the local services market. Thus, the Commission was clearly correct to require "parity" in the delivery of OSS capabilities. Nowhere is parity more important than in ordering and provisioning.

I would urge you to consider parity from three different perspectives:

- <u>First</u>, parity can't even be assessed without information about how the incumbent provides services and functionalities to itself and its customers.
- <u>Second</u>, the systems ILECs and CLECs use to provide OSS capabilities are sophisticated, and they can't be effectively integrated without full cooperation among ILECs and CLECs.
- <u>Third</u>, given the ways we know that ILECs operate today, parity can't be achieved without automated flow-through of ordering and provisioning information.

These issues apply equally to resale services and unbundled network elements. Let me discuss them in reverse order.

The Need for Automated Flow-Through

For many years, incumbents have been using -- and improving upon -- fully automated ordering and provisioning systems, which pass information internally without the need for human intervention. These systems reduce cost, increase accuracy, and speed the incumbents' ability to serve consumers. Just as important, consumers assume the existence of these capabilities and expect that all local providers will be able to meet or beat the service that they receive from the incumbents. Parity in a competitive marketplace is simply impossible without fully automated flow-through of new entrants' orders.

Cooperation Among Carriers Is Essential

ILEC and CLEC OSSs must be able to operate with each other on a seamless, end-to-end basis. Because multiple systems must be integrated, it is essential that the ILECs work cooperatively with CLECs, and that no ILEC be permitted to unilaterally dictate the standards that will apply to its interfaces. The most efficient way to do this is to implement standards that have been reviewed and adopted by the industry, acting as a whole.

But software and standards are only part of the story. It is perhaps even more critical that ILECs cooperate with CLECs on the adoption and implementation of business rules that apply to

the ILECs' electronic gateways. Business rules are the detailed application of standards that enable system users to "talk" to one another electronically. They go down to the level of whether an avenue address in an electronic record must be displayed as "AV" or "Ave." All parties who use a gateway must be fully aware of the rules that govern the delivery and processing of data, and these rules, once set, must remain stable.

Cooperation is necessary both in the context of resale and the purchase of unbundled network elements. In many cases, ILECs haven't even provided CLECs with the business rules and interfaces they need to order unbundled network elements beyond rudimentary local loops. In particular, until recently the ILECs have been unwilling even to negotiate how CLECs can order the unbundled network element platform. As a result, electronic ordering for the platform is simply unavailable today. The ILECs alone control the degree of difficulty involved in enhancing existing resale interfaces to support the platform.

The Need for Measurements

Finally, "parity" necessarily relies upon data, not ILEC assertions -- or promises. The baseline for parity in all cases is what the ILEC actually does for itself or its customers in comparable situations. For example, how long does it take an order submitted by an ILEC service representative to be provisioned? That is why the Local Competition Users Group (LCUG) has proposed a limited set of measurements that are necessary to track ILEC performance.

In addition, in many cases we don't know, and the ILECs haven't offered, key information needed to determine parity for a wide range of OSS functions. That is why LCUG has also proposed metrics that can be used to test an ILEC's performance against reasonable CLEC -- and customer – expectations.

Overview: Industry Guidelines for Operations Support Systems Functions

Developed by the ATIS-Sponsored Ordering and Billing Forum

Glen Sirles, Ordering and Billing Forum Moderator,

(Southwestern Bell)

Dianne Moore, Ordering and Billing Forum Assistant Moderator,

(MCI)

Susan Miller, Vice President and General Counsel, Alliance for Telecommunications Industry Solutions

FCC Common Carrier Bureau

Operations Support Systems Forum

May 28-29, 1997

1

Overview

- **Overview of the Alliance for Telecommunications Industry Solutions (ATIS).**

- **Overview of the Ordering and Billing Forum (OBF).**

  » **Mission**

  » **History**

  » **Structure**

  » **Process**

- **Role of OBF in Addressing Issues for Access to Operations Support Systems ("OSS") for Local Competition.**

- **Specific OBF Committee Involvement.**

- **Summary of OBF Work.**

2

ATIS Mission

- **Timely resolution of national and international telecommunications issues;**

- **Initiate and maintain flexible, open industry forums to address technical and operational issues;**

- **Information source to its members; and**

- **Promote industry progress with minimal regulatory intervention.**

ATIS Scope

- **Sponsors 9 Committees/Forums.**

- **2000+ participants/300 companies.**

- **Membership: North American (U.S., Mexico and Canada) and World Zone 1 Carribbean telecommunciations service providers, resellers of those services, enhanced service providers and manufacturers.**

4

ATIS Committees

- **Industry Leadership.**
- **Due Process.**
- **Operating guidelines to allow success.**

5

Committees

Standards and Guidelines Activities

| Standards Committee T1 - Telecommunications	**T1A1** Performance and Signal Processing Network Survivability Multimedia Communications	**T1E1** Power Systems/ Power Interfaces Analog Access Wideband Access Electrical Protection	**T1M1** Internetwork Planning/Engineering Testing and Operations Systems and Protocols	**T1P1** Personal Communications Wireless Access and Terminal Mobility Program Management and Standards	**T1S1** Architecture and Services Switching and Signaling Protocols Broadband ISDN	**T1X1** Synchronization Interfaces Metallic and Optical Hierarchical Interfaces
Carrier Liaison Committee	**Network Interconnection/ Interoperability Forum** Network Testing Network Installation & Maintenance Network Interconnection and Architecture Network Management Rating & Routing	**Ordering and Billing Forum** Access Ordering Provisioning /Billing Carrier Selection and Subscription 800/888 SMS Number Administration	**Industry Numbering Committee** North American Numbering Plan Guidelines Local Number Portability	**Toll Fraud Prevention Committee** Joint Fraud Investigation Guidelines Fraud Center Contact List		
Telecommunications Industry Forum	**Bar Code/Standard Coding** Bar Code Label Specifications Product Package Guidelines	**Information Product Interchange** Standard Generalized Markup Language Technical Illustrations Interchange	**Electronic Data Interchange** Data Interchange Standards EDI Guidelines	**Electronic Commerce** Electronic Communications Re-engineering Business Processes	**Electronic Communications Implementation Committee** Interactive Electronic Information Implementation of Electronic Communications	
Protection Engineers Group	**Electrical Protection Equipment** Arrester Unit Standards and Specifications					
Standards Committee 05 Wood Poles and Products	**Wood Crossarms and Timber for Utility Structures** ANSI Standards for Wood Poles Crossarms and Braces					
Network Reliability Steering Committee	**Analyze Network Outages** Initiate Corrective Action Industry/FCC Reports Liaison with FCC's Network Reliability and Interoperability Council					
SONET Interoperability Forum	**Intercarrier Interface Specification Group** Preventing Cascading Network Failure Data Synchronization Across Network Boundaries	**Network Management** DCC Architecture Information Modeling Graphical User Interface Functional Requirements for OS Platforms	**Remote Login** Implementation Specifications Remote Access to Network Management Functionality	**TARP/X.500** TID Address Resolution Protocol (TARP) Functional and Interface Specifications and Strategies	**Testing** Program Definition Conformance Testing Interoperability Testing Public Register	
Internetwork Interoperability Testing Committee	**Cross Industry Testing Program for Network Reliability**					
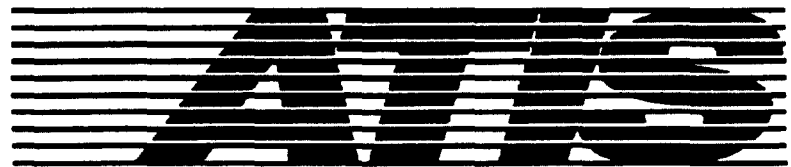
Alliance for Telecommunications Industry Solutions

Problem Solvers to the Telecommunications Industry

9

OBF Mission

To provide a forum for customers and providers in the telecommunications industry to identify, discuss and resolve national issues which affect ordering, billing, provisioning and exchange of information about access service, other connectivity and related matters.

OBF History

- Established in 1985 for ordering and billing of access services.

- Mission and scope expanded by consensus to include local competition issues in May 1995.

- First local competition issues introduced at that time.

- Throughout its history, OBF has resolved over 1300 issues.

Six OBF Standing Committees

Structure of the OBF:

- **Billing (BLG) Committee**

- **Ordering and Provisioning (O&P) Committee**

- **Message Processing (MSG) Committee**

- **Subscription (SUB) Committee**

- **Telecommunications Services Ordering Request (TOR)**

- **SMS/800 Number Administration Committee (Not addressing local competition issues.)**

OBF Process

- **Participation: 475+ representing 90+ companies.**

- **Meeting Frequency: quarterly in week-long General Session; Interim meetings scheduled to meet work load (virtually ongoing activity).**

- **Nature of Outputs: design of or changes to business processes which include:**

  - » **Specific interface guidelines;**

  - » **Informational requirements.**

10

Issue Resolution Process

- Two stages of closure, Initial and Final, provide the industry ample safeguards and periods for review, input and alteration of a resolution.

- An issue usually takes multiple meetings from the time it is first discussed to reach final resolution.

- Amount of work has been massive.

- Most OBF participants have other responsibilities at their companies.

- Based on history, implementation is recommended at the first step of closure called "Initial Closure."

OBF Committees' Involvement in Local Competition OSS

Process	OBF Committee Involved
Pre-Ordering	O&P/TOR
Ordering/Provisioning	O&P/TOR/SUB
Billing	BLG/MSG

Other ATIS Forum Involvement

- **Network Interconnection and Interoperability Forum (NIIF) - repair and maintenance.**

- **Telecommunication Industry Forum (TCIF) Electronic Data Interchange (EDI) Committee - data modeling**

- **TCIF's Electronic Communication Implementation Committee (ECIC) - communications platforms.**

Inter-Forum Liaison Created for Ordering OSSs

- **OBF Committees are responsible for the business process flows, interface guidelines, and informational requirements.**
  - » **Create Local Service Ordering Guideline (LSOG) and Local Service Request (LSR) forms.**
  - » **Version 2 released March, 1997.**
- **The EDI Committee is responsible for some data modeling.**
  - » **Included LSR Version 1 in EDI Version 7 ballot expected to be final June, 1997.**
  - » **LSR Version 2 in EDI Version 7.1 out for ballot September, 1997.**
- **The ECIC suggests communications platforms to the OBF (e.g., TCP/IP, SSL3, OSI).**

14